

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Withdrawn) A method of operating a gas phase growth system comprising:

a processing stage, in which an organometallic complex is vaporized by a vaporizer, and the vaporized organometallic complex is fed into a reaction chamber through a gas line communicating the vaporizer with the reaction chamber, whereby a film is formed on a substrate in the reaction chamber; and

a stabilizer feeding stage, in which a stabilizer for the organometallic complex is fed in a gaseous state into a gas area of the vaporizer or into the gas line, where the gas area is an area in which the organometallic complex has been vaporized and exists in a gaseous state during normal operation of the vaporizer, wherein the stabilizer feeding stage is executed when the vaporizer is not vaporizing the organometallic complex.

2. (Withdrawn) The method according to claim 1, wherein the method further comprises a pre-purging stage, in which the reaction chamber and the gas line or purged, wherein the pre-purging stage is executed before the processing stage, and the stabilizer feeding stage is executed when the pre-purging stage is executing.

3. (Withdrawn) The method according to claim 1, wherein the method further comprises a post-purging stage, in which the reaction chamber and the gas line are purged, wherein the post-purging stage is executed after the processing stage, and the stabilizer feeding stage is executed when the post-purging stage is executing.

4. (Withdrawn) The method according to claim 1, wherein the organometallic complex is Cu (hfac) TMVS and the stabilizer is TMVS.

5. (Currently Amended) A gas phase growth system comprising:
a reaction vessel defining a reaction chamber in which a substrate is processed;

a vaporizer that vaporizes ~~an organometallic complex~~ a liquid raw material, the vaporizer having therein a gas area in which the raw material exists in a vaporized state during normal operation of the vaporizer;

a gas line communicating the vaporizer with the reaction chamber to feed the ~~vaporized organometallic complex~~ raw material vaporized by the vaporizer into the reaction chamber; and

~~a stabilizer feeder that feeds a stabilizer for the organometallic complex in a gaseous state into a gas area of the vaporizer or into the gas line, where the gas area is an area in which organometallic complex has been vaporized and exists in a gaseous state during normal operation of the vaporizer,~~

a first passage that feeds the raw material in a liquid state into the gas area of the vaporizer, the first passage having an end which opens into the gas area;
and

a second passage that feeds a stabilizer, which suppresses decomposition of the raw material, into the gas area of the vaporizer, the second passage having an end which opens into the gas area;

wherein the second passage is arranged so that the stabilizer is supplied to the gas area without passing through any portion of the first passage upstream of the end of the first passage.

6. (Withdrawn) A vaporizer for vaporizing an organometallic complex to be fed into a reaction chamber of a gas phase growth system, said vaporizer comprising:

a body with a vaporizing chamber;

a first path through which the organometallic complex is fed into the vaporizing chamber; and

a second path through which a stabilizer for said organometallic complex is fed into a gas area of the body in a gaseous state, where the gas area is an area in which organometallic complex has been vaporized and exists in a gaseous state during normal operation of the vaporizer.

7. (Withdrawn) The vaporizer according to claim 6, wherein the second path is opened at the gas area within the vaporizing chamber.

Claims 8-12 (Cancelled).

13. (New) The gas phase growth system according to claim 5, wherein the end of the second passage is located adjacent to the end of the first passage on a downstream side of the end of the first passage.

14. (New) The gas phase growth system according to claim 5, wherein the ends of the first and second passages are configured so that the stabilizer is supplied into the gas area from the end of the second passage in a direction substantially perpendicular to a direction in which the raw material is supplied into the gas area from the end of the first passage.

15. (New) The gas phase growth system according to claim 5, wherein the first liquid passage includes a liquid reservoir chamber and a narrow hole, each arranged in the vaporizer, and the reservoir chamber is connected to the gas area through the narrow hole serving as a nozzle, which sprays the raw material stored in the reservoir chamber into the gas area.

16. (New) The gas phase growth system according to claim 15, wherein the vaporizer has a valve member adapted to open and close the narrow hole to control a supply of the raw material into the gas area.

17. (New) The gas phase growth system according to claim 5, wherein a carrier gas source is connected to the second passage to carry the stabilizer into the vaporizer.

18. (New) The gas phase growth system according to claim 5, wherein a third passage is connected to the gas area to feed a carrier gas into the gas area.

19. (New) The gas phase growth system according to claim 5, wherein the vaporizer has a valve member adapted to open and close the first gas passage to control a supply of the raw material into the gas area.

20. (New) The gas phase growth system according to claim 5, wherein the vaporizer is provided with a heater to heat the vaporizer.

21. (New) The gas phase growth system according to claim 5, wherein the raw material is an organometallic complex.